5. (a) What is pasteurization ? Explain HTST method of pasteurization in brief. 4

(b) Explain phosphatase test. 4

(c) Explain the process of cheese production in general. 4

OR

(d) Define milk. Write composition of milk. 4

(e) Explain the grades of milk. 4

(f) Explain sources of microorganisms in milk. 4

6. (a) Explain in brief Food infections. 4

(b) Describe production of idli in brief. 4

(c) What are the indicators of Food Contamination ? 4

OR

(d) Explain the sources of contamination of food. 4

(e) Explain Sauerkraut production. 4

(f) Describe any one method of Food Preservation. 4

7. Describe in detail enzyme classification and nomenclature.

OR

Explain in detail glycolysis. 12

Sixth Semester B. Sc. (Part – III) Examination

6S – MICROBIOLOGY

(Industrial Fermentation, Food Microbiology and Metabolism)

P. Pages : 4

Time : Three Hours] [Max. Marks : 80

Note : (1) All questions are compulsory.
(2) Draw neat and labelled diagrams wherever necessary.

1. (A) Fill in the blanks.

(i) Salmonellosis is a type of ———— infection.

(ii) Crowded plate technique is used for ————.

(iii) Milk pasteurization is confirmed by ———— test.

(iv) Red table wine contains ———% amount of alcohol. 2

(B) Choose the correct option :–

(i) Pasteurization temp. kills ——

(a) S. aureus (b) M.tuberculosis

(c) C.burnetii (d) All of these

(ii) Bacterial amylase is an example of —

(a) Vitamin (b) Apoenzyme

(c) Coenzyme (d) Enzyme

(iii) Glucose metabolism releases energy as ———

(a) ATP (b) ADP

(c) AMP (d) GTP

(iv) Glycolysis is also called as ——— pathway.

(a) GMP (b) CMP

(c) EMP (d) HMP 2

(C) Answer the following in **one** sentence :—

(i) Production strain

(ii) Active dry yeast

(iii) Concentrated milk

(iv) HOPS 4

2. (a) Explain any one method of primary screening. 4

(b) Explain in brief antifoam agents. 4

(c) Describe in brief aerobic and anaerobic fermentation. 4

OR

(d) Explain in brief inoculum build up. 4

(e) Describe in brief batch and continuous fermentation. 4

(f) Describe raw materials used in fermentation in brief. 4

3. With the help of flow-sheet explain in detail industrial production of Beer.

OR

Explain in detail Industrial production of citric acid. Add a note on its uses. 12

4. (a) Explain in detail production of SCP using bacteria. 4

(b) Explain in brief Baker's yeast production. 4

(c) Write the applications of amylase. 4

OR

(d) Explain Industrial production of Vit B_{12} 4

(e) Explain in brief active dry yeast. 4

(f) Draw the flow sheet of Penicillin production. 4